

What is Claimed is:

1. A system for controlling the distribution and use of digital works comprising:

means for creating usage rights, each instance of a usage right representing a specific instance of how a digital work may be used or distributed;

means for attaching a created set of usage rights to a digital work including a rendering right, said rendering right for permitting said digital work to be rendered, said rendering right further specifying watermark information to be embedded into a rendering of said digital work,

a communication medium for coupling repositories to enable exchange of repository transaction messages,

a general repository for storing and securely exchanging digital works with attached usage rights;

a rendering system comprising a rendering repository for receiving a digital work to be rendered from said general repository and a rendering device for rendering digital works, said rendering repository further comprising:

means for gathering watermark information specified in a print right associated with said digital work to be rendered; and

means for encoding said watermark information for embedding in said rendered digital work.

2. The system as recited in claim 1 wherein said rendering right is further for indicating a security level and watermarking capabilities which a rendering system must have in order to render said digital work.

3. The system as recited in claim 1 wherein said rendering right is a print right, said rendering system is a printing system and said rendering repository is a printer repository.

4. The system as recited in claim 3 further comprising digital work authoring means having means for placing a watermark character on a digital document.

5. The system as recited in claim 4 wherein said means for encoding said watermark information for embedding in said digital work is further comprised of means for encoding glyph patterns based on said watermark information to create a dynamic watermark font, wherein said glyph patterns correspond to watermark characters.

6. The system as recited in claim 5 wherein said means for encoding said watermark information for embedding in said digital work is further comprised of means for changing said watermark characters to have said dynamic watermark font.

7. The system as recited in claim 3 wherein said printer repository is in the same enclosure as said print device.

8. The system as recited in claim 3 wherein said printer repository is in a different enclosure from said print device.

9. The system as recited in claim 1 wherein said printer repository is further comprised of means for causing a printing fee to be paid when said document is printed.

10. The system as recited in claim 5 further comprising a watermark extraction means for extracting the watermark information from said digital work.

11. The system as recited in claim 10 wherein said watermark extraction means is further comprised of:

a scanner device for creating a bit mapped representation of a printed medium;

means for locating said watermark in said bit mapped representation of a printed medium; and

means for decoding embedded data contained in said watermark.

12. The system as recited in claim 11 wherein said means for decoding embedded data contained in said watermark of said watermark extraction means is comprised of means for decoding glyph patterns.

13. In a system for controlling the distribution and use of digital works, a method for providing a watermark on a rendered digital work comprising the steps of:

- a) a digital work creator assigning a rendering right to said digital work and storing in a distribution repository, said rendering right specifying watermark information indicating information identifying a rendering event;
- b) a user obtaining an encrypted version of said digital work from said distribution repository and storing in a user repository;
- c) said user requesting that said digital work be rendered;
- d) said user repository determining if said digital work has the appropriate rendering right;
- e) if said digital work has the appropriate rendering right, said user repository communicating with a rendering repository to establish a trusted session;
- f) said user repository transferring said digital work to said rendering repository;
- g) said rendering repository gathering watermark information specified in said rendering right;
- h) said rendering repository encoding data for said watermark information;

i) said rendering repository decrypting said digital work and embedding said watermark information; and

j) said rendering repository transmitting said digital work with embedded watermark information to a rendering device for rendering.

14. The method as recited in claim 13 wherein said rendering right is a print right and said rendering repository is a printer repository.

15. The method as recited in claim 13 wherein prior to said step of said digital work creator storing said digital work in a distribution repository, said digital work creator placing watermark characters on said digital work, said watermark characters in an original watermark font.

16. The method as recited in claim 14 wherein said rendering event is printing of the digital work and said step of said rendering repository gathering watermark information specified in said rendering right is further comprised of the step of said rendering repository obtaining identification certificates for said user repository and said printer repository and extracting identification information.

17. The method as recited in claim 16 wherein said step of said print repository encoding data for said watermark information is further comprised of the step of defining glyph patterns defining said watermark information as characters in a dynamic watermark font.

18. The method as recited in claim 17 wherein said step of said printer repository embedding said watermark information is further comprised of the step of said printer repository changing the font of said watermark characters to said dynamic watermark font.

19. In a system for controlling the distribution and use of digital works, a method for providing a watermark on a rendered digital work comprising the steps of:

- a) a digital work creator assigning a rendering right to said digital work and storing in a distribution repository, said rendering right specifying criteria for a rendering system that must be satisfied before the digital work can be rendered; watermark information indicating information identifying a rendering event;
- b) a user requesting a rendered version of said digital work be rendered on a user rendering system having a rendering repository;
- c) said distribution repository determining if said user rendering system mess the specified criteria in said rendering right;
- d) if said rendering system satisfies said specified criteria, said distribution repository encrypting said digital work and sending to said rendering repository;
- e) said rendering repository gathering watermark information specified in said rendering right;
- f) said rendering repository encoding data for said watermark information;

g) said rendering repository decrypting said digital work and embedding said watermark information; and

h) said rendering repository transmitting said digital work with embedded watermark information to a rendering device for rendering.

20. The method as recited in claim 19 wherein said criteria for said rendering repository is comprised of a security criteria and a watermarking criteria.

21. The method as recited in claim 19 wherein said rendering right is further for specifying watermark information indicating information identifying a rendering event.

22. The method as recited in claim 21 wherein said rendering right is a print right and said rendering repository is a printer repository.